WHAT IS CLAIMED IS

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     1. An image processing apparatus for changing the size of image data of an original image, comprising:

     a comparison part comparing an image information value which indicates predetermined image

10   information of the original image, with a corresponding predetermined reference value which is previously set for each of the predetermined image information; and

     a sharing-ratio determining part which, based on a comparison result of said comparison part,

15   determines a sharing ratio in processing for changing the size of the image data between a first processing way and a second processing way different from said first processing way.

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     2. The image processing apparatus as claimed in claim 1, wherein:

25   said first processing way comprises a way for

achieving a high-order image processing for controlling image degradation.

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3. The image processing apparatus as claimed in claim 1, wherein:

said second processing way comprises a way of

10 simply changing the number of pixels without changing the respective pixel values.

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4. The image processing apparatus as claimed in claim 1, wherein:

said sharing-ratio determining part adjusts the sharing ratio in the processing between the first

20 and second processing ways so that the entire process of a predetermined image size-change processing is completed within a given time duration when a required processing time which is taken for performing the entire processing of the predetermined image size-change

25 processing exceeds the given time duration.

5. The image processing apparatus as claimed in claim 1, wherein:

said comparison part compares an image data size-change rate required with a predetermined reference value instead of comparing the predetermined image information value of the original image.

6. The image processing apparatus as claimed in claim 1, wherein:

the information of the image information value and predetermined reference value which said comparison part compares comprises information concerning the data size of the original image.

7. The image processing apparatus as claimed in claim 1, wherein:

the information of the image information value and predetermined reference value which said comparison part compares comprises information concerning the

number of colors expressible by each pixel of the
original image.

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        8.   The image processing apparatus as claimed
in claim 1, wherein:

        the information of the image information value

10   and predetermined reference value which said comparison
part compares comprises information concerning the
resolution of the original image.

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        9.   The image processing apparatus as claimed
in claim 1, wherein:

        the information of the image information value

20   and predetermined reference value which said comparison
part compares comprises information as to whether or not
the original image is a color image or a monochrome
image.

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10. The image processing apparatus as claimed in claim 1, wherein:

the sharing ratio between the first and second processing ways is determined according to a

5 predetermined attribute of the original image.

10 11. The image processing apparatus as claimed in claim 1, wherein:

the sharing ratio between the first and second processing ways is determined according to a permissible time duration for completing the entire process of a

15 relevant image size-change processing.

20 12. The image processing apparatus as claimed in claim 1, wherein:

said first processing way comprises a process for preventing a jaggy from becoming conspicuous.

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13.   The image processing apparatus as claimed in claim 10, wherein:

the predetermined attribute of the original image which is used for determining the sharing ratio by

5   said sharing-ratio determining part comprises the number of used colors in the original image.

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14.   The image processing apparatus as claimed in claim 1, wherein:

the sharing ratio between the first and second processing ways is determined by said sharing-ratio

15   determining part according to the contents of image processing in the entire process of a relevant image size-change processing.

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15.   The image processing apparatus as claimed in claim 1, wherein an application of the first and second processing ways is made in such a manner that one

25   of the first and second processing way is applied, and,

after that, the other processing way is applied.

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16. The image processing apparatus as claimed in claim 15, wherein the application of the first and second processing ways is made in such a manner that one of the first and second processing way, which one requires a longer processing time, is applied first, and, after that, the other processing way is applied.

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17. The image processing apparatus as claimed in claim 1, wherein an application of the first and second processing ways is made in such a manner that one of a first mode and a second mode is selected according to a comparison result of said comparison part, wherein said first mode is such that both said first and second processing ways are applied in a combination manner, and said second mode is such that only one of the first and second processing ways is applied.

18. The image processing apparatus as claimed in claim 17, wherein said second mode is such that only one of the first and second processing way, which one requires a longer processing time, is applied.

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19. The image processing apparatus as claimed in claim 1, wherein:

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said first processing way comprises an image size-change processing for an integer size-change rate, and said second processing way comprises an image size-change processing for a size-change rate which includes

15 a fraction.

20 20. An image processing method for changing the size of image data of an original image, comprising:

a comparison step comparing an image information value which indicates predetermined image information of the original image, with a corresponding

25 predetermined reference value which is previously set

for each of the predetermined image information; and

a sharing-ratio determining step, based on a comparison result of said comparison part, determining a sharing ratio in processing for changing the size of the

5   image data between a first processing way and a second processing way different from said first processing way.

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21.   The image processing method as claimed in claim 20, wherein:

said first processing way comprises a way for achieving a high-order image processing for controlling

15   image degradation.

20   22.   The image processing method as claimed in claim 20, wherein:

said second processing way comprises a way of simply changing the number of pixels without changing the respective pixel values.

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23. The image processing method as claimed in claim 20, wherein:

said sharing-ratio determining step comprises the step of adjusting the sharing ratio in the

5   processing between the first and second processing ways so that the entire process of a predetermined image size-change processing is completed within a given time duration when a required processing time which is taken for performing the entire processing of the

10   predetermined image size-change processing exceeds the given time duration..

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24. The image processing method as claimed in claim 20, wherein:

in said comparison step, an image data size-change ratio required is compared with a predetermined

20   reference value instead of comparing the predetermined image information value of the original image.

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25. The image processing method as claimed in claim 20, wherein:

the information of the image information value and predetermined reference value which is applied in
5 said comparison step for comparison comprises information concerning the data size of the original image.

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26. The image processing method as claimed in claim 20, wherein:

the information of the image information value
15 and predetermined reference value which is applied in said comparison part for comparison comprises information concerning the number of colors expressible by each pixel of the original image.

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27. The image processing method as claimed in claim 20, wherein:
25 the information of the image information value

and predetermined reference value which is applied in said comparison part for comparison comprises information concerning the resolution of the original image.

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28. The image processing method as claimed in

10   claim 20, wherein:

the information of the image information value and predetermined reference value which is applied in said comparison part for comparison comprises information as to whether or not the original image is a

15   color image or a monochrome image.

20   29. The image processing method as claimed in claim 20, wherein:

the sharing ratio between the first and second processing ways is determined according to a predetermined attribute of the original image.

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30. The image processing method as claimed in claim 20, wherein:

the sharing ratio between the first and second processing ways is determined according to a permissible time duration for completing the entire process of a relevant image size-change processing.

31. The image processing method as claimed in claim 20, wherein:

said first processing way comprises a process for preventing a jaggy from becoming conspicuous.

32. The image processing method claimed in claim 29, wherein:

the predetermined attribute of the original image which is used for determining the sharing ratio in said sharing-ratio determining step comprises the number of used colors in the original image.

33. The image processing method as claimed in claim 20, wherein:

the sharing ratio between the first and second processing ways is determined in said sharing-ratio

5   determining step according to the contents of image processing in the entire process of a relevant image size-change processing.

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34. The image processing method as claimed in claim 20, wherein an application of the first and second processing ways is made in such a manner that one of the

15   first and second processing way is applied, and, after that, the other processing way is applied.

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35. The image processing method as claimed in claim 34, wherein the application of the first and second processing ways is made in such a manner that one of the first and second processing way, which one

25   requires a longer processing time, is applied, and,

after that, the other processing way is applied.

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     36.   The image processing method as claimed in claim 20, wherein an application of the first and second processing ways is made in such a manner that one of a first mode and a second mode is selected according to a

10 comparison result of said comparison part,

     wherein said first mode is such that both said first and second processing ways are applied in a combination manner, and said second mode is such that only one of the first and second processing ways is

15 applied.

20   37.   The image processing method as claimed in claim 36, wherein said second mode is such that only one of the first and second processing way, which one requires a longer processing time, is applied.

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38. The image processing method as claimed in claim 20, wherein:

said first processing way comprises an image size-change processing for an integer size-change rate,

5 and said second processing way comprises an image size-change processing for a size-change rate which includes a fraction.

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39. A program for causing a computer to execute each step of the method claimed in claim 20.

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40. A program for causing a computer to execute each step of the method claimed in claim 21.

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41. A program for causing a computer to
25 execute each step of the method claimed in claim 22.

42. A program for causing a computer to execute each step of the method claimed in claim 23.

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43. A program for causing a computer to execute each step of the method claimed in claim 24.

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44. A program for causing a computer to execute each step of the method claimed in claim 25.

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45. A program for causing a computer to
20 execute each step of the method claimed in claim 26.

25 46. A program for causing a computer to

execute each step of the method claimed in claim 27.

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      47. A program for causing a computer to execute each step of the method claimed in claim 28.

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      48. A program for causing a computer to execute each step of the method claimed in claim 29.

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      49. A program for causing a computer to execute each step of the method claimed in claim 30.

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      50. A program for causing a computer to

25   execute each step of the method claimed in claim 31.

51. A program for causing a computer to execute each step of the method claimed in claim 32.

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52. A program for causing a computer to execute each step of the method claimed in claim 33.

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53. A program for causing a computer to execute each step of the method claimed in claim 34.

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54. A program for causing a computer to

20 execute each step of the method claimed in claim 35.

25   55. A program for causing a computer to

execute each step of the method claimed in claim 36.

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56. A program for causing a computer to execute each step of the method claimed in claim 37.

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57. A program for causing a computer to execute each step of the method claimed in claim 38.